We claim:

1. A method of diagnosing stroke in a subject, comprising:

determining the presence or amount of a plurality of subject-derived markers in a sample obtained from said subject, wherein said plurality of markers are independently selected from two or more members of the group consisting of specific markers of neural tissue injury, markers related to blood pressure regulation, markers related to coagulation and hemostasis, and markers related to inflammation, and markers related to apoptosis; and

correlating the presence or amount of said plurality of markers to the occurrence of a stroke in said subject.

2. A method according to claim 1, wherein said plurality of markers are independently selected from the group consisting of adenylate kinase, brain-derived neurotrophic factor, calbindin-D, creatine kinase-BB, glial fibrillary acidic protein, lactate dehydrogenase, myelin basic protein, neural cell adhesion molecule (NCAM), c-tau, neuropeptide Y, neuron-specific enolase, neurotrophin-3, proteolipid protein, S-100β, thrombomodulin, protein kinase C γ, atrial natriuretic peptide (ANP), pro-ANP, B-type natriuretic peptide (BNP), NT-pro BNP, pro-BNP C-type natriuretic peptide, urotensin II, arginine vasopressin, aldosterone, angiotensin I, angiotensin II, angiotensin III, bradykinin, calcitonin, procalcitonin, calcitonin gene related peptide, adrenomedullin, calcyphosine, endothelin-2, endothelin-3, renin, urodilatin, acute phase reactants, cell adhesion molecules, C-reactive protein, interleukins, interleukin-1 receptor agonist, monocyte chemotactic protein-1, caspase-3, lipocalin-type prostaglandin D synthase, mast cell tryptase, eosinophil cationic protein, KL-6, haptoglobin, tumor necrosis factor α, tumor necrosis factor β, Fas ligand, soluble Fas (Apo-1), TRAIL, TWEAK, fibronectin, macrophage migration inhibitory factor (MIF), vascular endothelial growth factor (VEGF), caspase-3, cathepsin D, α-spectrin, plasmin, fibrinogen, D-dimer, β-thromboglobulin, platelet factor 4, fibrinopeptide A, platelet-derived growth factor, prothrombin fragment 1+2, plasmin-α2-antiplasmin complex, thrombin-antithrombin III complex, P-selectin, thrombin, von Willebrand factor, tissue factor, and thrombus precursor protein, or markers related thereto.

3. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least one specific marker of neural tissue injury selected from the group consisting of adenylate kinase, brain-derived neurotrophic factor, c-tau, calbindin-D, creatine kinase-BB, glial

fibrillary acidic protein, lactate dehydrogenase, myelin basic protein, neural cell adhesion molecule (NCAM), neuron-specific enolase, neurotrophin-3, proteolipid protein, S-100β, thrombomodulin, and protein kinase C γ, or markers related thereto.

4. A method according to claim 3, wherein said plurality of subject-derived markers comprise NCAM, creatine kinase-BB, and S-100β, or markers related thereto.

5. A method according to claim 3, wherein said plurality of subject-derived markers comprise NCAM, creatine kinase-BB, c-tau, and S-100β, or markers related thereto.

6. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least one marker related to apoptosis.

7. A method according to claim 6, wherein said plurality of subject-derived markers comprise at least one marker related to apoptosis selected from the group consisting of caspase-3, cathepsin D, and α-spectrin, or markers related thereto.

8. A method according to claim 6, wherein said plurality of subject-derived markers comprise caspase-3 or a marker related thereto.

9. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least one marker related to inflammation.

10. A method according to claim 9, wherein said plurality of subject-derived markers comprise at least one marker related to inflammation selected from the group consisting of acute phase reactants, cell adhesion molecules, C-reactive protein, interleukins, interleukin-1 receptor agonist, monocyte chemotactic protein-1, caspase-3, lipocalin-type prostaglandin D synthase, mast cell tryptase, eosinophil cationic protein, KL-6, haptoglobin, tumor necrosis factor α, tumor necrosis factor β, Fas ligand, soluble Fas (Apo-1), TRAIL, TWEAK, fibronectin, macrophage migration inhibitory factor (MIF), and vascular endothelial growth factor (VEGF), or markers related thereto.

11. A method according to claim 9, wherein said plurality of subject-derived markers comprise at least one marker related to inflammation selected from the group consisting of matrix metalloprotease-9, VEGF, C-reactive protein, or a marker related thereto.

12. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least one marker related to blood pressure regulation.

13. A method according to claim 12, wherein said plurality of subject-derived markers comprise at least one marker related to blood pressure regulation selected from the group consisting of atrial natriuretic peptide (ANP), pro-ANP, B-type natriuretic peptide (BNP), NT-pro BNP, pro-BNP C-type natriuretic peptide, urotensin II, arginine vasopressin, aldosterone, angiotensin I, angiotensin II, angiotensin III, bradykinin, calcitonin, procalcitonin, calcitonin gene related peptide, adrenomedullin, calcyphosine, endothelin-2, endothelin-3, renin, and urodilatin, or markers related thereto.

14. A method according to claim 12, wherein said plurality of subject-derived markers comprise BNP or a marker related thereto.

15. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least one specific marker of neural tissue injury, at least one marker related to inflammation, and at least one marker related to apoptosis.

16. A method according to claim 15, wherein said plurality of subject-derived markers comprise at least one marker related to blood pressure regulation and at least one marker related to coagulation and hemostasis.

17. A method according to claim 1, wherein said plurality of subject-derived markers comprise at least 5 markers selected from the group consisting of IL-1ra, C-reactive protein, von Willebrand factor (vWF), creatine kinase-BB, c-Tau, D-dimer, vascular endothelial growth factor (VEGF), matrix metalloprotease-9 (MMP-9), neural cell adhesion molecule (NCAM), BNP, S100β, and caspase-3.

18. A method according to claim 17, wherein said plurality of subject-derived markers comprise BNP, creatine kinase-BB, c-tau, D-dimer, C-reactive protein, S100β, NCAM, and caspase-3, wherein from one to three of said plurality of subject-derived markers is optionally replaced by an equal number of markers selected from the group consisting of IL-1ra, MMP-9, and VEGF.

19. A method according to claim 17, wherein said plurality of subject-derived markers comprise BNP, creatine kinase-BB, c-tau, D-dimer, C-reactive protein, S100β, NCAM, and caspase-3.

20. A method according to claim 1, wherein the sample is from a human.

21. A method according to claim 1, wherein the sample is selected from the group consisting of blood, serum, and plasma.

22. A method according to claim 1, wherein the assay method is an immunoassay method.

23. A method according to claim 1, wherein the correlating step comprises determining the concentration of each of said plurality of subject-derived markers, and individually comparing each marker concentration to a threshold level.

24. A method according to claim 1, wherein the correlating step comprises determining the concentration of each of said plurality of subject-derived markers, calculating a single index value based on the concentration of each of said plurality of subject-derived markers, and comparing the index value to a threshold level.

25. A method according to claim 1, wherein the method comprises determining a temoral change in at least one of said subject-derived markers, and wherein said temporal change is used in said correlating step.

26. A method according to claim 1, wherein said method distinguishes stroke with a sensitivity of at least 70% at a specificity of at least 85% when compared to normal subjects.

27. A method according to claim 1, wherein said method distinguishes stroke with a sensitivity of at least 80% at a specificity of at least 90% when compared to normal subjects.

28. A method according to claim 1, wherein said method distinguishes stroke with a sensitivity of at least 90% at a specificity of at least 90% when compared to normal subjects.

29. A method according to claim 1, wherein said method distinguishes stroke with a sensitivity of at least 70% at a specificity of at least 85% when compared to subjects exhibiting symptoms that mimic stroke symptoms.

30. A device for performing the method of claim 1, comprising a plurality of discrete locations, each configured and arranged to immobilize for detection one of said plurality of subject-derived markers.

31. The device of claim 30, wherein each of said plurality of discrete spots comprises an antibody that binds one of said plurality of subject-derived markers.